24739
S/131/61/000/007/001/003
B105/B206

Improvement of the technology

Legend to Table 1: 1) Preparation method for zirconium products, 2) weight of unit volume of the blanks, g/cm^3; 3) burned products; 4) weight of unit volume, g/cm^3; 5) water absorption, %; 6) shrinkage, %; a) casting from stabilized ZrO_2 without previous grinding of the initial materials; b) casting from stabilized ZrO_2 (usual process)

Table

Метод изготовления циркониевых изделий	Объемный вес сырца, г/см³	Обожженные изделия		
		Объемный вес, г/см³	водопоглощение, %	усадка, %
1	2	4	5	6
а Литье из стабилизированной ZrO_2 без предварительного помола исходных материалов	3,1	5,3	0,3	16,0
б Литье из стабилизированной ZrO_2 (обычная технология)	2,8—3,1*	5,4	0,0	17—20

Card 3/3

Improvement of the technology ...

medium on the viscosity index of the crude zirconium mass was also tested. The particles are characterized by high values of the ζ potential, which cause the stability of the crude mass. With the parameters mentioned, an experimental batch of crucibles with a content up to 300 cm^3 was cast. The characteristic values of the blanks and of the products burned for 9 hr at 1600°C are compared in the table with the characteristic values for previous grinding of ZrO_2 and rinsing before stabilization. The duration of the production cycle is shortened by about ten days and grinding and rinsing of ZrO_2 previous to preparation for stabilization are omitted. The use of stabilized ZrO_2 without previous grinding showed that the sintering ability of the material was slightly improved. There are 1 figure and 1 table.

ASSOCIATION: Podol'skiy zavod ogneupornykh izdeliy (Podol'sk Plant of Refractory Products) D.S. Rutman, L.V. Vinogradova, T.S. Makarova; Khimiko-tekhnologicheskiy institut im. Mendeleyeva (Chemical-technological Institute imeni Mendeleyev) G.P. Kalliga, V.A. Kolbasova, Ye.I. Shal'nov.

24739

S/131/61/000/007/001/003
B105/B206

21.2110
15.2230

AUTHORS: Rutman, D.S., Vinogradova, L.V., Makarova, T.S., Kalliga, G.P., Kolbasova, V.A., Shal'nov, Ye.I.

TITLE: Improvement of the technology of zirconium products for casting from aqueous suspensions of the pre-stabilized ZrO_2

PERIODICAL: Ogneupory, no. 7, 1961, 301-302

TEXT: Experiments are described here which were conducted at the Podol'skiy zavod ogneupornykh izdeliy (Podol'sk Plant of Refractory Products) to investigate the possibility of avoiding the previous grinding of zirconium dioxide and, thus, shorten the technology of zirconium products. Industrial zirconium dioxide with a content of 97.5% ZrO_2 + HfO_2 and chemically pure calcium carbonate were used for the experiment. A mixture of 93% ZrO_2 and 7% CaO was prepared. Briquets were pressed from it at a pressure of 500 kg/cm^2 and burned at temperatures of 1600°C and 1700°C respectively. The microscopic and X-ray structural analysis showed a stabilization degree of 93-95% of ZrO_2 in the briquets. The effect of the pH of the

Card 1/3

Manufacture of sintered ceramics ... 89691

S/131/61/000/003/001/001
B105/B206

ASSOCIATION: Podol'skiy zavod ogneupornykh izdeliy (Podol'sk Plant for Refractories) Vinogradova, L. V., Makarova, T. S., Rutman, D. S.; Khimiko-tekhnologicheskiy institut im. Mendeleyeva (Institute of Chemical Technology imeni Mendeleyev) Poluboyarinov, D. N., Popil'skiy, R. Ya., Serova, G. A.

Card 3/3

means of paraffin with an addition of oleic acid. The shaping of crucibles and shield tubes for thermocouples from magnesium oxide by the "freezing-on" method permits the manufacture of products with a wall thickness of 5-0.3 mm. After partial burning out of the paraffin at a temperature of about 200°C, the products were fired in a regenerative medium (H_2) at 1700°C in an electric furnace with a molybdenum coil. The firing time was 5 to 6 hr (2 hr in the high-temperature zone). After sintering, the average weight by volume of the products was 3.36 to 3.38 g/cm^3, and their apparent porosity 0 to 0.4%; the white products showed good translucence. Pyrometric ceramics produced from magnesium oxide in the form of shield tubes for thermocouples and capillary tubes, permits temperature measurement up to more than 2000°C. The relatively simple process permits the manufacture of products for use at high temperatures, the waste being very small. There are 1 figure and 1 Soviet-bloc reference.

89691
S/131/61/000/003/001/001
B105/B206

15.2000 1454, 1153, 1155

AUTHORS: Vinogradova, L. V., Makarova, T. S., Rutman, D. S., Poluboyarinov, D. N., Popil'skiy, R. Ya., Serova, G. A.

TITLE: Manufacture of sintered ceramics from magnesium oxide

PERIODICAL: Ogneupory, no. 3, 1961, 123-124

TEXT: This article describes the process of manufacturing thin-walled, sintered crucibles and shield tubes for thermocouples from magnesium oxide. This process was elaborated at the Podol'skiy zavod ogneupornykh izdeliy (Podol'sk Plant for Refractories) jointly with the kafedra keramiki (Department of Ceramics) of the Khimiko-tekhnologicheskiy institut im. Mendeleyeva (Institute of Chemical Technology imeni Mendeleyev). The crucibles are intended for metal smelting. The initial material was commercial magnesium oxide with a content of ~98% MgO, the preparation of which (firing temperature and mode of crushing) was worked out according to previous studies. Commercial magnesium in powdery form is first fired in molds at 1300°C and then finely ground in a vibrating mill by means of steel balls. The powder was plasticized by

Card 1/3

STEPANOV, A.V.; NAKAROVA, T.P.

Electric migration study of trivalent plutonium complex formation in solutions of ethylenediaminetetraacetic acid. Radiokhimiia 7 no.6:664-669 '65.

Using the electric migration method for studying Am^{III} complex oxalates. Ibid.:670-673

(MIRA 19:1)

L 37200-66 EWT(m)/EWP(j)/T RM

ACC NR: AP6012419 A SOURCE CODE: UR/0183/65/000/006/0041/0043

AUTHOR: Yasnovskiy, V. M.; Begletsov, V. V.; Makarova, T. P.; Tseytlina, L. A.

ORG: Leningrad Branch VNIIV (Leningradskiy filial VNIIV)

TITLE: Vapor phase acetylation of viscose staple fiber

SOURCE: Khimicheskiye volokna, no. 6, 1965, 41-43

TOPIC TAGS: synthetic fiber, chemical reaction, vaporization

ABSTRACT: The process of activating viscose fibers for acetylation by treating with aqueous salt solutions was investigated. Sodium, potassium, zinc and calcium acetates and sodium carbonate were evaluated as activators for vapor phase acetylation of the fibers. 11-12% sodium acetate on the fiber is optimum. Equilibrium in the solution-fiber system is then attained after 10 minutes of activation. Since 35-45% bonding with acetic acid is attained in 3-10 minutes of acetylation, vapor phase acetylation may be amenable to a continuous operation. Orig. art. has: 3 figures, 1 table and 5 equations.

SUB CODE: 07/11/ SUBM DATE: 16Feb65/ ORIG REF: 003/ OTH REF: 008

Card 1/1 MLP UDC: 677.4:542.951.12

TATEVOSYAN, Ye.L.; MAKAROVA, T.P.; MEOS, A.I.

Characteristics of alkali cellulose prepared by the continuous method. Khim. volok. no.4:26-29 '65. (MIRA 18:8)

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna i Leningradskiy tekstil'nyy institut im. S.M. Kirova.

DARVINA, V.V.; MAKAROVA, T.P.

Use of optical bleaching agents for the whitening of viscose fibers. Khim. volok. no.1:60-62 '65. (MIRA 18:2)

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna.

TATEVOSYAN, Ye.L.; MAKAROVA, T.P.; KUPTSAN, N.A.; MEOS, A.I.

Effect of the conditions of the continuous basic treatment of cellulose on the rate of its oxidative degradation. Khim. volok. no.5:33-36 '64. (MIRA 18:1)

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna (for Tatevosyan, Makarova, Kuptsan). 2. Leningradskiy tekstil'nyy institut imeni Kirova (for Meos).

LIKENKOV, O.S.; MAKAROVA, T.P.

Use of epoxy compounds for the crease-resistant finishing of fibers. Khim. volok. no.2:52-55 '64. (MIRA 17:5)

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna.

BUDYLOV, A.V.; VOL'F, L.A.; MEOS, A.I.; MAKAROVA, T.P.; SHEMKOV, N.K.

Studying the kinetics of the formation of the structure of polyvinyl alcohol fibers. Khim. volok. no.2:24-27 '64.
(MIRA 17:5)

1. LITiLP im. S.M. Kirova (for Budylov, Vol'f, Meos).
2. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna (for Makarova).
3. Leningradskiy zavod iskusstvennogo volokna (for Shemkov).

DARVINA, V.V.; MAKAROVA, T.P.

Bleaching of viscose staple fiber by means of optically bleaching agents. Khim. volok. no.4:38-39 '63.
(MIRA 16:8)

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna.

SHIMKO, I.G.; KUVIN, A.A.; VOYTSEKHOVSKAYA, Ye.S.; TATEVOSYAN, Ye.L.; MAKAROVA, T.P.; GAYDUKOV, K.A.; GINZBERG, M.A.; Prinimali uchastiye: POLYAKOVA, G.V.; BEZVERSHENKO, V.I.

Introducing continuous mercerization systems in the manufacture of viscose rayon. Khim. volok. no.3:61-65 '63.
(MIRA 16:7)

1. Kiyevskiy kombinat (for Shimko, Kuvin, Voytsekhovskaya). 2. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna (for Tatevosyan, Makarova). 3. Kiyevskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna (for Gaydukov, Polyakova, Bezvershenko). 4. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna (for Ginzberg).
(Rayon) (Mercerization)

TATEVOSYAN, Ye.L.; MAKAROVA, T.P.; MEOS, A.I.

Effect of the conditions of mercerization and of cellulose quality on filterability during continuous mercerization. Khim.volok. no.1:30-33 '63. (MIRA 16:2)

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna (for Tatevosyan, Makarova).
2. Leningradskiy tekstil'nyy institut (for Meos).
(Mercerization) (Cellulose) (Filters and filtration)

TATEVOSYAN, Ye.L.; MAKAROVA, T.P.; MEOS., A.I.

Method for determining the optimum time for the filtration of caustic soda with alkali cellulose. Khim.volok. no.5:31-34 '61. (MIRA 14:10)

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna (for Tatevosyan, Makarova).
2. Leningradskiy tekstil'nyy institut imeni S.M.Kirova (for Meos).
(Filters and filtration) (Cellulose) (Sodium hydroxide)

GEYSBERG, S.M.; SNETKOV, N.V.; MAKAROVA, T.P.; PEREPELKIN, K.Ye.; TATEVOSYAN, Ye.L.

Adoption of a continuous unit for the mercerization of cellulose. Khim.volok. no.3:51-55 '60. (MIRA 13:7)

1. Leningradskiy zavod iskusstvennogo volokna i Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna. (Leningrad--Cellulose) (Mercerization)

MIKHAYLOV, N.V.; BUKOV, G.A.; GORBACHEVA, V.O.; MAKAROVA, T.P.; v rabote prinimali uchastiye: LARIONOV, P.E.; SOROKINA, V.I.; ZOTOV, Ya.E.

Studying the formation mechanism of synthetic fibers from molten materials. Khim.volok. no.1:33-36 '59. (MIRA 12:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna.

(Textile fibers, Synthetic)

YUGOSLAVIA/Chemical Technology. Chemical Products and Their Applications--Fats and oils. Waxes. Soap. Detergents. Flotation reagents. I-27

Abs Jour: Ref Zhur-Khimiya, No 3, 1957, 10140

Abstract: is described. The author also discusses the application of the husks in the production of xylose, furfurol, and of activated charcoal, as well as a filler in the production of phenolic plastics.

Card 2/2

MAKAROVA, T.P.

I-26

USSR/Chemical Technology. Chemical Products and Their Application--Synthetic fibers.

Abs Jour: Ref Zhur-Khimiya, No 3, 1957, 10094

Author: Maos, A. I., Makarova, T. P. Sorokin, Ya. Z., and Poropelkin, K. Ye.

Inst : Not given

Title : The Cohesion of Staple Fibers

Orig Pub: Tekstil'n. prom-st, 1956, No 8, 14-15

Abstract: The cohesion of various types of rayon staple fiber and of fibers treated with aqueous solutions of a series of substances differing in their content of polar and nonpolar groups has been determined. It has been established that the cohesion of braided staple fibers is lower by a factor of 2 than that of ordinary cut fiber. Coiling markedly increases the cohesion of the fibers. Friction and cohesion are increased by treating the fibers with polar preparations.

Card 1/2

KAZMINA, T.I.; MAKAROVA, T.P.

Effect of the composition of natural waters on the solubility of naphthenic acids. Trudy VNIGRI no.131:389-392 '59.
(MIRA 12:9)

(Naphthenic acids) (Water, Underground)

SHVEDOV, V.P.; MAKAROVA, T.P.; IVANOVA, L.M.; PAVLOVA, N.A.

Determination of radioactive strontium in water samples.
Radiokhimiia 1 no.5:616-618 '59. (MIRA 13:2)
(Strontium--Analysis) (Water--Analysis)

KAZMINA, T.I.; BEL'KOV, G.I.; MAKAROVA, T.P.; ROGACHEVSKAYA, TS.A.

Determination of small concentrations of elements in oil field waters. VNIGRI no.105:140-173 '57. (MIRA 11:9)
(Water--Analysis)

SOV/56-35-6-5/44

On the Ratio Between the Yields of the Isomeric and the Ground State of Zn^{69}, Produced in Various Nuclear Reactions

ASSOCIATION: Radiyevyy institut Akademii nauk SSSR
(Radium Institute of the Academy of Sciences, USSR)

SUBMITTED: June 16, 1958

Card 3/3

On the Ratio Between the Yields of the Isomeric and the Ground State of Zn^{69}, Produced in Various Nuclear Reactions

σ^*/σ of Zn^{69} was hitherto measured as 0.29 (capture of thermal neutrons by Zn^{68}, reference 1) and from the reaction $Ge^{72}(n,\alpha)Zn^{69}$ by using 14 Mev neutrons as being $\sigma^*/\sigma = 1.1$ (Ref 4). d-irradiation was carried out in the outer chamber of a cyclotron (E_d with an accuracy of up to 0.5 Mev), and n-irradiation on a neutron generator with a tritium target. The result obtained by the investigation of the reaction a) is shown by figure 1: Within the energy range of $2.5 \leq E_d \leq 9$ Mev, σ^*/σ increases slightly with increasing energy and remains constant at ~ 0.5. The reaction b) for $E_n = 14$ Mev results in $\sigma^*/\sigma = 1.4$, and reaction c) finally results in a value fluctuating by 0.5 within the error limits for deuteron energies between 4 and 8 Mev. The fact that Levkovskiy (Ref 4) found practically the double value for the reaction $Ge^{72}(n,\alpha)Zn^{69}$ (with E_n being equal) is finally discussed.- There are 2 figures and 4 references, 1 of which is Soviet.

Card 2/3

21(7) SOV/56-35-6-5/44

AUTHORS: Zherebtsova, K. I., Makarova, T. P., Nemilov, Yu.A., Funshteyn, B.L.

TITLE: On the Ratio Between the Yields of the Isomeric and the Ground State of Zn^{69}, Produced in Various Nuclear Reactions (O soot-noshenii mezhdu vykhodami izomernogo i osnovnogo sostoyaniy Zn^{69}, obrazuyemogo v rezul'tate razlichnykh yadernykh reaktsiy)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1958, Vol 35, Nr 6, pp 1355-1357 (USSR)

ABSTRACT: In the introduction, several papers dealing with this subject which have already been published (Refs 1-3) are dealt with, and the problem is discussed. The authors themselves investigated the following reactions:
a) $Zn^{68}(d,p)Zn^{69}$; b) $Ga^{69}(n,p)Zn^{69}$; c) $Ga^{71}(d,\alpha)Zn^{69}$.
Zn^{69} occurs as a β-active isotope with the half-life of 57 min., and it has an isomeric state which goes over into the ground state with a half-life of 13.8 h.
The ratio σ^*/σ ($=Zn^{69}$-yield in the isomeric state/Zn^{69}-yield in the ground state) was determined by the authors from the analysis of the decay curve (β-particles were counted by means of a G.M.counter).

Card 1/3

ZHEREBTSOVA, K. I., MAKAROVA, T. P., NEMILOV, Yu. A., and FUNSHTEYN, B. L.

"Sudr la production relative des etata isomeriques m et fondamentaux ^{69}Zn produits dans des reactions nucleaires differentes."

report presented at the Intl. Congress for Nuclear Interactons (low Energy) and Nuclear Structure (Intl. Union Pure and Applied Physics) Paris, 7-12 July 1958.

L 18754-66
ACC NR: AP6003770

0

the other ions, were installed in the apparatus. The germanium used was n-type with resistivity ~38 ohm-cm. In all cases when the ion beam struck the surface of the germanium, its electric conductivity increased. The total number of electron-hole pairs excited by an ion of given energy before it is completely stopped in the target is estimated with the aid of Fermi-Dirac statistics at ~500 pairs when bombarded with 3-keV sodium ions and ~2000 pairs when bombarded with lithium ions of the same energy. The number of pairs is found to decrease with increasing atomic number of the bombarding ions and to increase monotonically with increase in the ion energy. The values obtained experimentally agree with the theoretical estimate. Orig. art. has: 3 figures and 2 formulas.

SUB CODE: 20/ SUBM DATE: 01Jul65/ ORIG REF: 004/ OTH REF: 001

Card 2/2 mc

L 18754-66 EWT(1)/EWT(m)/EWP(t) IJP(c) JD/JG/AT

ACC NR: AP6003770 SOURCE CODE: UR/0181/66/008/001/0111/0114

AUTHORS: Abroyan, I. A.; Makarova, T. N.; Pukshanskiy, A. L.; Titov, A. I.

ORG: Leningrad Polytechnic Institute im. M. I. Kalinin (Leningradskiy politekhnicheskiy institut)

84
8

TITLE: Excitation of electrons in germanium by alkaline metal ions

21,44,55 55 27 27

SOURCE: Fizika tverdogo tela, v. 8, no. 1, 1966, 111-114

TOPIC TAGS: germanium, single crystal, alkali metal, ion bombardment, electric conductivity, pair production, electron interaction

ABSTRACT: The authors investigated the increase in the conductivity of germanium single crystals upon excitation of electron-hole pairs by lithium and sodium ions of energy up to 6 kev. The induced conductivity was investigated by a pulse technique described in detail earlier (FTT v. 4, 2719, 1962). The target preparation procedure is also described elsewhere. To compare the pair-production efficiencies of electron and ion bombardment, two guns, one emitting electrons and

2

Card 1/2

MAKAROVA, T.N.

Studies on neuromuscular accommodation in children and adolescents from 7 to 16 years of age. Fiziol. zhur. SSSR no.3:334-340 '54. (MLRA 7:4)

1. Nauchno-issledovatel'skiy institut fizicheskoy kul'tury, Leningrad.

MAKAROVA, T.N.

Effect of bromides on the nervous mechanisms of transplanted cancer. Uch. zap. Ped. inst. Gerts. 179:251-276 '58.
(MIRA 16:5

(BROMINE—PHYSIOLOGICAL EFFECT) (CANCER)
(NERVOUS SYSTEM)

MAKAROVA, T. N., Cand Biol Sci -- (diss) "Effect of factors altering the condition of the nervous system on the growth of intertwined cancer in animals." Leningrad, 1960. 19 pp; (Ministry of Education RSFSR, Leningrad State Pedagogical Inst im A. I. Gertsen, Chair of Physiology and Anatomy); 150 copies; price not given; (KL, 50-60, 132)

MAKAROVA, T. N.

Oscillography in diseases with pain syndrome in the region of the heart. Klin. med., Moskva 28:8, Aug. 50. p. 87-8

1. Of the Hospital Therapeutic Clinic (Director—Prof. M. N. Tumanovskiy), Izhevsk Medical Institute, Izhevsk.

CLML 19, 5, Nov., 1950

MAKAROVA, T. N

36871. K voprososu o znachenii metoda ostsillografii pri issledovanii nekotorykh serdechno-sosudistykh bol'nykh. Trudy Med. kn-ta (IZhevsk. gos. med. in-t), t.LX, 1949, c. 202-06

SO: Letopis' Zhurnal Nykh Statey, Vol. 50, Moskva, 1949

MAKAROVA, T. N.

Makarova, T. N. - "The cardiovascular system of patients with endemic goiter and the effect of operational treatment on its condition", Trudy Medinstituta (Izhev. gos. med. in-t), Vol. VI, 1948, p. 202-0[illegible].

SO: U-4110, 17 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 17, 1949).

ANTSUTA, Ye.B., arkhit.; KIRILLOV, N.P., arkhit.; KUZNETSOV, V.V., arkhit.; SLOTINTSEVA, M.N., arkhit.; PYATIN, S.G., inzh. Prinimali uchastiye: CHUYENKO , R.G., arkhit.; MOSEVICH, Ya.Ya., arkhit.; GLAZKOV, F.I., st. tekhnik; GOLUKHOV, G.I., inzh.; SAMSONOVA, T.T., inzh.; KOLESOVA, Ye.Ye., st. tekhnik; MAKAROVA, T.N., tekhnik; SHAMBAT, M.S., inzh.; SEMENOVA, G.V., inzh.; PLATUNIN, Yu.S., gr. inzh. ; VOL'NOVA, T.F., tekhnik; SOLOV'YEV, M.I., inzh.; MOREV, I.A., tekhnik.

[Two-apartment house with two-room apartments; standard plan 1-102-5] Dvukhkvartirnyi zhiloi dom, kvartiry v dve komnaty; tipovoi proekt 1-102-5. Moskva, Al'bom 1. 1960. 27 p. (MIRA 14:10)

1. Moscow. TSentral'nyy institut tipovykh proyektov.
(Apartment houses--Designs and plans)

ACCESSION NR: AP4032503

several times more rapidly than in dilute caustic. In this respect they are inferior to the zirconium-containing glasses. Orig. art. has: 1 table.

ASSOCIATION: None

SUBMITTED: 11May63

SUB CODE: MT, SS

NO REF SOV: 005

ENCL: 00

OTHER: 000

Card 2/2

ACCESSION NR: AP4032503 S/0080/64/037/004/0886/0887

AUTHOR: Molchanov, V. S.; Makarova, T. M.

TITLE: The effect of lanthanum and zirconium on the alkali resistance of silicate glasses.

SOURCE: Zhurnal prikladnoy khimii, v. 37, no. 4, 1964, 886-887

TOPIC TAGS: silicate glass, alkali resistance, solubility, lanthanum containing silicate glass, zirconium containing silicate glass, lanthanum, zirconium

ABSTRACT: Since prior work (ZhPKh, XXXIV, 1, 100 (1961)) indicated that the addition of 5 mol% lanthanum oxide insolubilized alkali silicate glasses with respect to 0.5N NaOH, this study was conducted to determine how far these improved properties extended. Comparisons were made of the solubilities in various concentrations of NaOH and mixtures of NaOH and Na_2CO_3 of glasses containing 5 mol% ZrO_2 or La_2O_3 and 21% ZrO_2 or La_2O_3. Lanthanum imparts high alkali resistance, exceeding that of zirconium, to silicate glasses only when basicity is below that of 2N NaOH. In concentrated caustic, carbonate and caustic-carbonate solutions containing a higher proportion of carbonate, the lanthanum oxide glasses disintegrate

Card 1/2

ACCESSION NR: AP4010490

in low-alkaline boro-silicate glass.
"In conclusion, I extend my profound gratitude to the supervisor of this project, V. S. Molchanov."
Orig. art. has: 1 figure and 2 sets of formulas.

ASSOCIATION: None

SUBMITTED: 07Jun62

SUB CODE: ML, CH

DATE ACQ: 14Feb64

ENCL: 00

NR REF SOV: 006

OTHER: 000

Card 3/3

ACCESSION NR: AP4010490

Second group

$77SiO_2 \cdot 6B_2O_3 \cdot (17-x)Na_2O \cdot xK_2O$ x=0, 2, 4, 6, 9, 12, 17 (e)

$63SiO_2 \cdot 20B_2O_3 \cdot (17-x)Na_2O \cdot xK_2O$ x=0, 2, 4, 6, 9, 12, 17 (f)

In the first group the boric anhydride content of the glasses remained constant (13%) while the total amount of alkaline oxides was changed (from 7 to 17%). In the second group, the alkali content of the glasses remained constant (17%) while the boric anhydride changed from 6 to 20%. In all the glass samples the sodium oxide was gradually replaced by potassium oxide which made it possible to determine the influence of the alkaline oxides and boric anhydride on the "two-alkali effect." It was found that the pure sodium glasses containing 7% and 8% alkaline oxide [series (a) and (b)] were considerably less stable than the pure potassium glasses of the same composition. Similar results were obtained in the investigation of the chemical stability of the low-alkali two-component glasses as well as the three-component glasses containing lead oxide or calcium oxide as a third component. The two-alkali effect is not observable

Card 2/3

ACCESSION NR: AP4010490 S/0080/64/037/001/0200/0202

AUTHOR: Makarova, T. M.

TITLE: Chemical stability of boro-silicate glass containing two alkaline oxides

SOURCE: Zhurnal prikladnoy khimii, v. 37, no. 1, 1964, 200-202

TOPIC TAGS: polyalkaline effect, two-alkali effect, alkaline oxides, boric anhydride, boro-silicate glass, potassium oxide, thermic decomposition, dehydrogenation, ternary silicate glass, 4-component glass.

ABSTRACT: Two groups of boro-silicate glasses were investigated. These glasses were:

First group

$80SiO_2 \cdot 13B_2O_3 \cdot (7-x)Na_2O \cdot xK_2O$ x=0, 1, 2, 3, 4, 5, 6, 7; (a)
$78SiO_2 \cdot 13B_2O_3 \cdot (9-x)Na_2O \cdot xK_2O$ x=0, 1, 2, 3, 4, 5, 6, 9; (b)
$74SiO_2 \cdot 13B_2O_3 \cdot (13-x)Na_2O \cdot xK_2O$ x=0, 1, 2, 3, 4, 5, 7, 13; (c)
$70SiO_2 \cdot 13B_2O_3 \cdot (17-x)Na_2O \cdot xK_2O$ x=0, 2, 4, 6, 8.5, 12, 17; (d)

Card 1/3

MAKAROVA, Tamara Mikhaylovna; YEVSTROP'YEV, K.S., doktor khim. nauk prof., nauchn. red.; KUNYAVSKAYA, T.M., red.

[Causes for the formation of greasy deposits on optical parts] Prichiny obrazovaniia zhirovykh naletov na opticheskikh detaliakh. Moskva, Mashinostroenie, 1964. 53 p. (MIRA 17:5)

MOLCHANOV, V.S.; MAKAROVA, T.M.

Effect of oxides of polyvalent elements on the alkali-resistance of glasses. Zhur. prikl. khim. 34 no.1:100-107 Ja '61. (MIRA 14:1)

(Glass—Corrosion) (Oxides)

Electrical conductivity and...

0	2,36	409	9,65	6,50	6	2,91	83	11,47	7,77
8	2,36	448	9,97	6,85	8,5	2,89	95	12,10	8,24
12	2,36	493	9,79	6,60	12	2,81	—	12,07	8,14
16	2,36	470	8,23	5,87	17	2,96	420	10,36	7,01

Серия M (R_2O = 17, MgO = 13)

0	2,44	32	7,23	4,91
2	2,44	25	8,09	5,43
4	2,43	23	8,76	5,86
6	2,44	27	9,41	6,42
8,5	2,44	29	10,29	7,02
12	2,43	39	—	—
14	2,43	—	9,67	6,68
17	2,41	71	8,09	5,72

Серия Z (R_2O = 17, ZnO = 13)

0	2,66	12	7,03	4,87
2	2,65	11	8,05	5,45
4	2,64	10	8,75	5,97
6	2,66	12	9,29	6,29
8,5	2,64	13	10,00	6,75
12	2,65	—	10,05	7,00
14	2,63	—	9,55	6,61
17	2,55	18	8,15	5,75

Серия P (R_2O = 17, PbO = 13)

p.t.o.

0	3,21	35	9,01	6,02	8,5	3,19	23	11,95	8,26
2	3,20	27	10,10	6,71	12	3,24	34	—	—
4	3,23	0	10,82	7,41	14	3,18	118	—	—
6	3,27	14	11,48	7,83	17	3,19	130	10,07	7,45

Card 6/6

Electrical conductivity and...

Legend to Table 2: 1) content of K_2O, %, 2) specific gravity, 3) consumption of 0.01 N HCl_1 mole; 4) log ρ at:; 5) series.

% K_2O в стекле 1	Удельный вес 2	Расход 0,01 N HCl, 3 мл	4 lg ρ при 150°	4 lg ρ при 300°	% K_2O в стекле 1	Удельный вес 2	Расход 0,01N HCl, 3 мл	4 lg ρ при 150°	4 lg ρ при 300°
5 Серия *a* ($R_2O = 13$, $RO = 0$)					5 Серия *C* ($K_2O = 17$, $CaO = 13$)				
0	2,33	300	6,97	4,81	0	2,53	29	8,15	5,53
2	2,32	182	8,42	5,65	2	2,54	25	9,23	6,23
4	2,32	130	9,45	6,39	4	2,52	23	9,87	6,79
6	2,33	160	9,95	6,82	6	2,53	26	10,60	7,21
8	2,33	252	9,99	6,87	8,5	2,50	27	11,39	7,86
10	2,33	296	9,77	6,68	12	2,52	38	10,59	7,15
13	2,33	340	8,61	6,01	17	2,48	57	9,33	6,51
5 Серия *b* ($R_2O = 16$, $RO = 0$)					5 Серия *B* ($R_2O = 17$, $BaO = 13$)				
0	2,35	465	6,58	4,51	0	2,94	73	8,89	6,09
2	2,35	423	—	—	2	2,94	46	9,96	6,74
4	2,35	323	8,81	5,87	4	2,89	54	10,77	7,25

Card 5/6

Electrical conductivity and...

Legend to Table 1:
1) Index of the series;
2) mole %

Индексы серий	2 Состав, мол %						
	SiO_2	R_2O	MgO	CaO	BaO	ZnO	PbO
a	87	13	—	—	—	—	—
b	84	16	—	—	—	—	—
M	70	17	13	—	—	—	—
C	70	17	—	13	—	—	—
B	70	17	—	—	13	—	—
Z	70	17	—	—	—	13	—
P	70	17	—	—	—	—	13
1							

Card 4/6

Electrical conductivity and...

represent two fundamentally different phenomena under the influence of the two-alkali metals contained in the glass. The authors state that the increase of resistivity is probably determined by the "multi-component effect". It will obviously take place on the first addition of any new component to an initial glass of arbitrary composition. The authors thank G. V. Bogoyavlenskaya for the analyses made. Papers by O. V. Mazurin and Ye. S. Borisovskiy, by G. A. Pavlova, O. V. Mazurin and Petrovskiy, as well as O. V. Mazurin and R. V. Brailovskaya are mentioned. There are 3 figures, 2 tables, and 10 references: 8 Soviet-bloc.

ASSOCIATION: Leningradskiy tekhnologicheskiy institut im. Lensoveta; Kafedra tekhnologii stekla (Leningrad Institute of Technology imeni Lensovet; Department of Glass Technology). Gosudarstvennyy opticheskiy institut (State Optical Institute)

SUBMITTED: April 2, 1959

Card 3/6

tion of the glass (powder 70-50μ) was determined through titration of the water extract with 0.01 N HCL (indicator methyl red). Table 2 shows the resistivity, specific gravity and resistivity (ϱ) of the glass types. From these results the authors draw the following conclusions: 1) The increase of the resistance of glass types which is caused by replacing one alkali oxide by another one (two-alkali effect), changes only slightly with regard to value and position of the maximum, if oxides of bivalent metals are introduced instead of silica. The resistance is thereby increased by several orders of magnitude. The maximum is reached at a ratio $Na_2O : K_2O$ = 4:5. 2) With a gradual replacement of N_2O by K_2O, the chemical resistivity of glass types against boiling water passes a maximum which lies at $N_2O : K_2O$ = 5:1. For the glass types investigated the resistivity increase lies between 74 and 15%, as compared with the resistivity of the best one-alkali glass. The nature of a bivalent metal admixed to a two-alkali glass influences the value of the maximum, but not its position. 3) The aforementioned differences prove that the change of the electrical conductivity on the one hand and the chemical resistivity on the other hand,

S/153/60/003/006/007/009
B103/B206

AUTHORS: Makarova, T. M., Mazurin, O. V., Molchanov, V. S.

TITLE: Electrical conductivity and chemical stability of silica glass containing two alkali metals

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, v. 3, no. 6, 1960, 1072-1078

TEXT: The authors studied the phenomena which are the mutual basis for the processes of electrical conductivity and chemical destruction of glass. As is known (Refs. 2,3), the electrical conductivity as well as dielectric losses can be reduced by replacing one alkali metal in the glass by another one. This phenomenon was named "neutralization effect" by G. I. Skanavi (Ref. 4). The authors do not consider this special term to be suitable and propose the designation "Two-alkali effect". This effect permits the improvement of the glass insulation properties without notably changing the other properties. Table 1 contains data on the composition of the glass types studied in % by mole. The chemical stability of the glass was determined by its behavior against water by the titration method. The destruc-

Card 1/6

SOV-26-58-11-17/49

AUTHORS: Makarova, T.M., Molchanov, V.S. (Leningrad)

TITLE: The Spontaneous Motion of Drops Over Solid Surfaces (Samoproizvol'noye dvizheniye kapel' po tverdym poverkhnostyam)

PERIODICAL: Priroda, 1958, Nr 11, pp 87 - 88 (USSR)

ABSTRACT: The spontaneous motion of drops over solid surfaces is explained by the phenomenon of a selective adsorption of octadecyl spirit and stearic acid with oriented films on steel and glass. The phenomenon proceeds with such an intensity that the very thinnest film carries along a very large drop of oil. The motion comes to a stop as soon as the entire surface of the body is covered by the film. For demonstration purposes, the easily obtainable motion effect of vaseline oil with an addition of octadecyl spirit is recommended. The dependence of the spontaneous motion on the size of the solid surface still remains unexplained. There is 1 set of photos and 7 references, 1 of which is American, 2 British, 1 French and 3 Soviet.

1. Drops--Motion 2. Thin films--Surface properties

Card 1/1

KARVETSKIY, A.V.; SIGEL', M.G.; KULICHKIN, A.V.; DEMIN, A.M.; RYZHOVA, V.K.; FEDER, R.M.; MAKAROVA, T.L.; MEYER, R.A.; STEPANOVA, V.P.; SKURATOV, A.D., red.; KHAUSTOVA, A.K., tekhn. red.

[Economy of Ul'ianovsk Province; statistical collection] Narodnoe khoziaistvo Ul'ianovskoi oblasti; statisticheskii sbornik. Ul'ianovsk, 1961. 271 p. (MIRA 15:5)

1. Ulyanovsk (Province) Statisticheskoye upravleniye. 2. Nachal'nik Statisticheskogo Upravleniya Ul'yanovskoy oblasti (for Skuratov). (Ul'ianovsk Province--Statistics)

VLASHCHENKO, L.F.; NOVIKOV, V.M.; ZINOV'YEVA, M.M.; SIDOROVA, A.P.; KARDASHOVA, A.A.; KLEYMENOV, I.Ya.; KRASNOPOL'SKIY, N.M. [deceased]; **LUKASH, Ye.G.**; SAMOFALOV, P.Ye.; YASHINA, Ye.I.; KULIKOV, P.I., dots., retsenzent; MAKAROVA, T.I., kand. tekhn. nauk, retsenzent; MERENBURG, A.N., spets. red.; KOSSOVA, O.N., red.; SOKOLOVA, I.A., tekhn.red.

[Handbook for the technologist of the fishing industry] Spravochnik tekhnologa rybnoi promyshlennosti. Moskva, Pishchepromizdat. Vol.1. 1963. 589 p. (MIRA 17:3)

BOLOTINA, F.Ye.; GAMBARYAN, Kh.P.; DENISOVA, G.A.; DUBROVINA, L.I.; KOZHINA, I.S.; KYURKCHAN, V.N.; MAKAROVA, T.I.; PAVLOVA, U.G.; REZVETSOV, O.A.; SMIRNOVA, V.V.; SURZHIN, S.N., kand. tekhn. nauk; TAMAMSHYAN, S.G.; TRUSOVA, S.A.; FILOGRIYEVSKAYA, Z.D.; CHINENOVA, E.G.; SHISHKINA, N.N.; IL'IN, M.M., zasl. deyatel' nauki RSFSR, doktor biol. nauk prof., red.; PRITYKINA, L.A., red.; ZARSHCHIKOVA, L.N., tekhn. red.

[Spice and aromatic plants of the U.S.S.R. and their use in the food industry] Priano-aromaticheskie rasteniia SSSR i ikh ispol'zovanie v pishchevoi promyshlennosti. Moskva, Pishchepromizdat, 1963. 430 p. (MIRA 17:2)

MAKAROVA, T.I., kand.tekhn.nauk; SERGEYEVA, T.V., mladshiy nauchnyy sotrudnik

Investigating the characteristics of spices used in fish processing.
Trudy VNIIRO 45:35-47 '62. (MIRA 16:5)
(Fishery products—Preservation) (Spices)

BARBAYANOV, Konstantin Aleksandrovich; LEMARIN'YE, Konstantin Petrovich; MAKAROVA, T.I., kand. tekhn. nauk, spets. red.; NOZDRINA, V.A., red.; SATAROVA, A.M., tekhn. red.

[Fish canning] Proizvodstvo rybnykh konservov. Moskva, Pishchepromizdat, 1961. 407 p. (MIRA 15:3)
(Fish, Canned)

MAKAROVA, T.I., VOSKRESENSKY, N.A.

"The utilization and processing of fish and other fishery products in the Soviet Union."

Report presented at the FAO Seminar and Study Tour for Fishery Administrators from the Indo-Pacific and Mediterranean Regions, Moscow 11 Sep- 14 Oct 1961.

MAKAROVA, T.I.; SURZHIN, S.N.; PAVLOVA, U.G.; SERGEYEVA, T.V.

Use of Russian spices in the fish industry. Trudy Bot.inst.Ser. 5 no.6:260-278 '60. (MIRA 13:6)
(Fishery products--Preservation)
(Spices)

VOSKRESENSKIY, Nikolay Aleksandrovich; MAKAROVA, T.I., kand. tekhn. nauk, spetsred.; KOSSOVA, O.N., red.; KISINA, Ye.I., tekhn. red.

[Technology of the salting, smoking, and drying of fish] Tekhnologiia posola, kopcheniia i sushki ryby. Izd. 2., perer. i dop. Moskva, Pishchepromizdat, 1958. 546 p. (MIRA 11:10)
(Fishery products--Preservation)

MAKAROVA, T. I.

DORMENKO, Vladimir Vladimirovich; MAKAROVA, T.I., retsenzent; ALIMOV, V.D., retsenzent; spetsredaktor; KOSSOVA, O.N., redaktor; YAROV, E.M., tekhnicheskiy redaktor

[The production of frozen fish fillets] Proizvodstvo morozhenogo rybnogo file. Moskva, Pishchepromizdat, 1956. 42 p. (MLRA 10:2)
(Fish, Frozen)

MAKAROVA, T.I.

LAZAREVSKII, Alekseĭ Anatol'yevich; BEREZIN, N.T., retsenzent; NOVIKOV, V.N., retsenzent; MAKAROVA, T.I., kandidat tekhnicheskikh nauk, redaktor; MOROZOVA, I.I., redaktor; GOTLIB, E.M., tekhnicheskiy redaktor.

[Technical and chemical control in the fish processing industry; manual for workers in plant and research laboratories] Tekhnokhimicheskii kontrol' v ryboobrabatyvaiushchei promyshlennosti; posobie dlia rabotnikov zavodskikh i issledovatel'skikh laboratorii. Moskva, Pishchepromizdat, 1955. 518 p. (MLRA 9:5)
(Fishery products)

MAKAROVA, T. I.

KLEINENBERG, S.E., doktor biol.nauk, red.; MAKAROVA, T.I., kand.tekhn. nauk, red.

[Soviet whaling industry] Kitoboinyi promysel Sovetskogo Soiuza. Pod red. S.E.Kleinenberga i T.I.Makarovoi. Moskva, Izd-vo zhurnala "Rybnoe khoziaistvo," 1955. 117 p. (MIRA 11:4)
(Whaling)

1. MAKAROVA, T. I., SERGEEVA, T. V.

2. USSR (600)

4. Caviar

7. Making weakly salted caviar from the close-sealed fish, Rybn. Khoz. 33, no. 3, 1953.

9. **Monthly List of Russian Accessions**, Library of Congress, May 1953. Unclassified.

MAKAROVA, T. I.

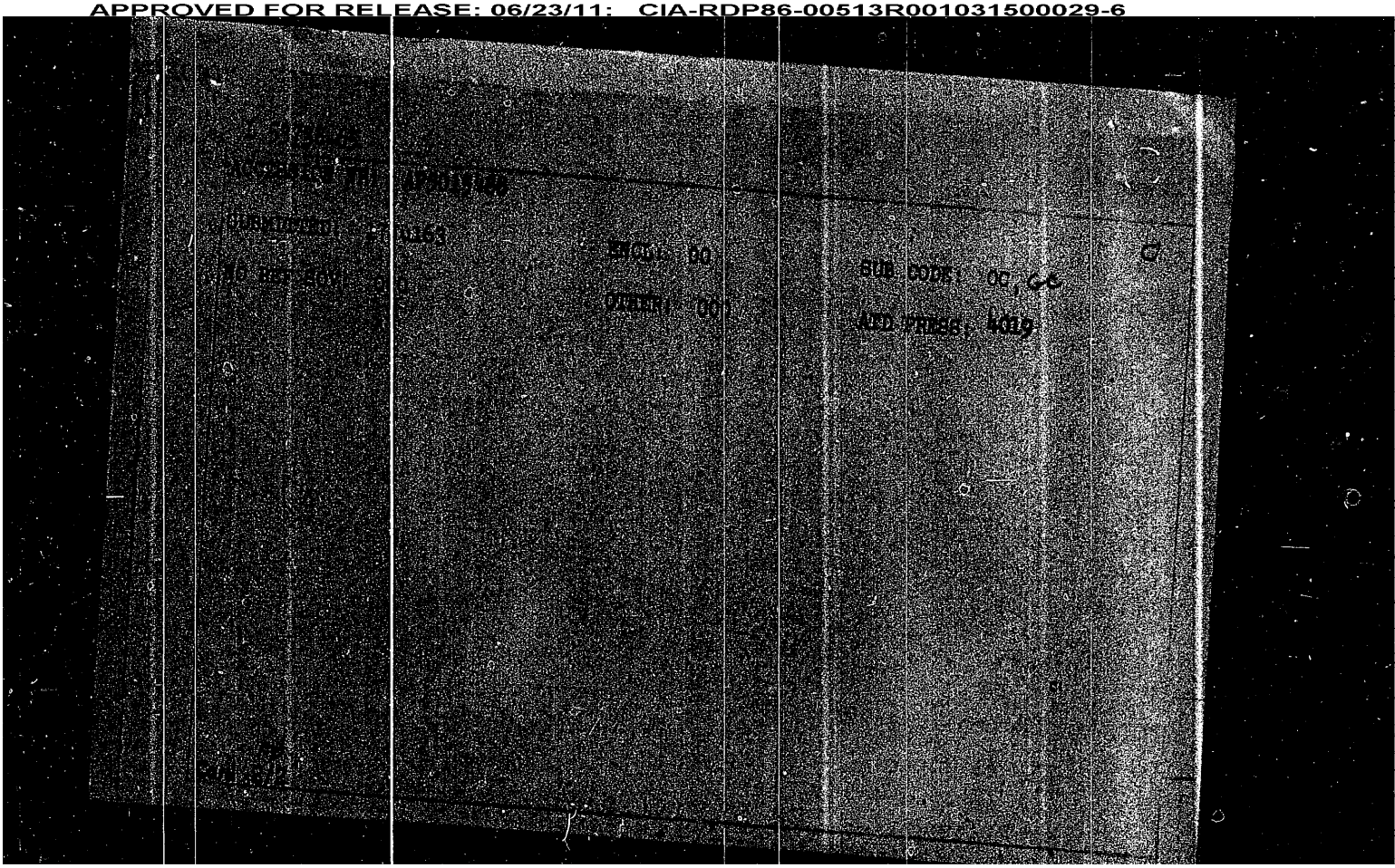
Caviar

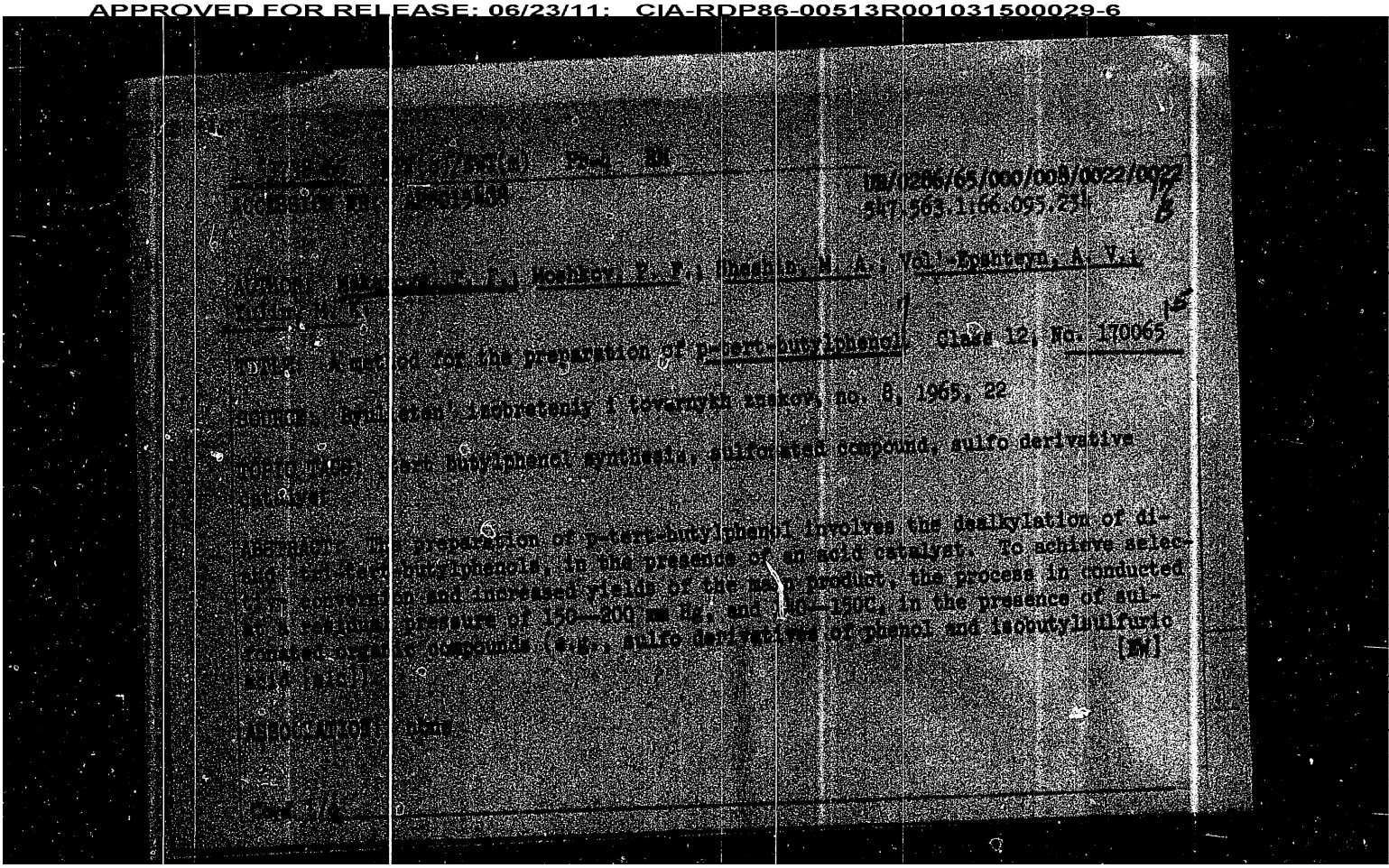
Improving the method for preparing pasteurized soft caviar. Ryb. khoz. 28 no. 7, 1952.

Monthly List of Russian Accessions, Library of Congress, November 1952. UNCLASSIFIED.

MAKAROVA, [illegible].; FAYBUSOVICH, A.I., redaktor; VODZINSKIY, V.V., tekhnicheskiy redaktor

[How to prepare the caviar] Kak prigotovit' ikru osetrovykh. Moskva, Pishchepromizdat, 1952. 50 p. (MLRA 10:2)
(Caviar)



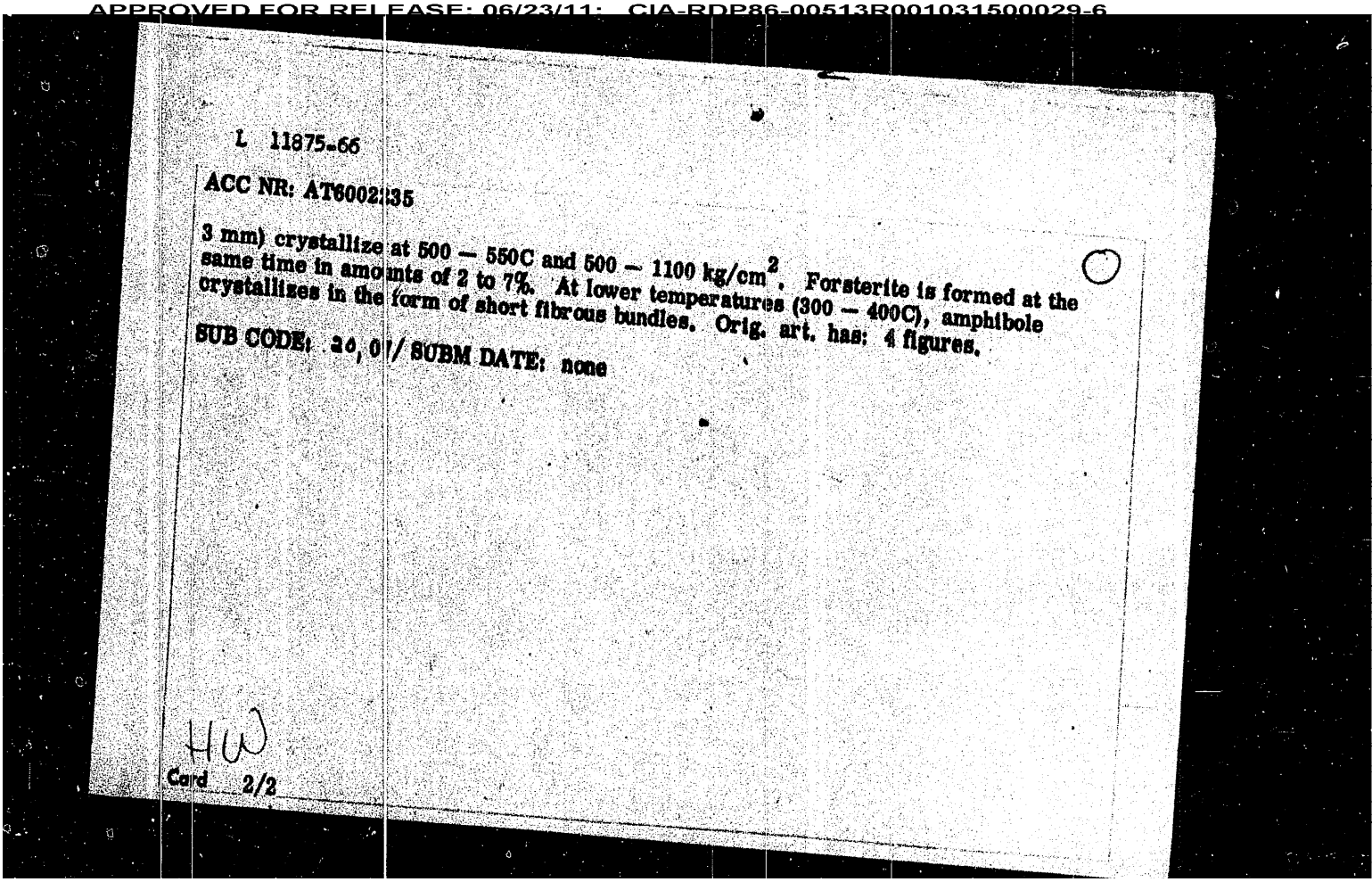


ILLEGIBLE

..., I.V., KOCHETKOV, S.V.; DAVANKOV, V.A.; DAVIDOVICH, Yu.A.; MAKAROVA, T.A.

Advances in the synthesis of polypeptides. Usp. khim. 34 no.5: 777-849 My '65. (MIRA 18:7)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.



L 11875-66

ACC NR: AT6002135

3 mm) crystallize at 500 — 550C and 500 — 1100 kg/cm^2. Forsterite is formed at the same time in amounts of 2 to 7%. At lower temperatures (300 — 400C), amphibole crystallizes in the form of short fibrous bundles. Orig. art. has: 4 figures.

SUB CODE: 20, 07 / SUBM DATE: none

HW

Card 2/2

L 11875-66 EWP(e)/EWT(m)/EWP(b) WW/WH

ACC NR: AT6002235 SOURCE CODE: UR/2564/65/006/000/0014/0017

AUTHOR: Fedoseyev, A. D.; Makarova, T. A.

ORG: none

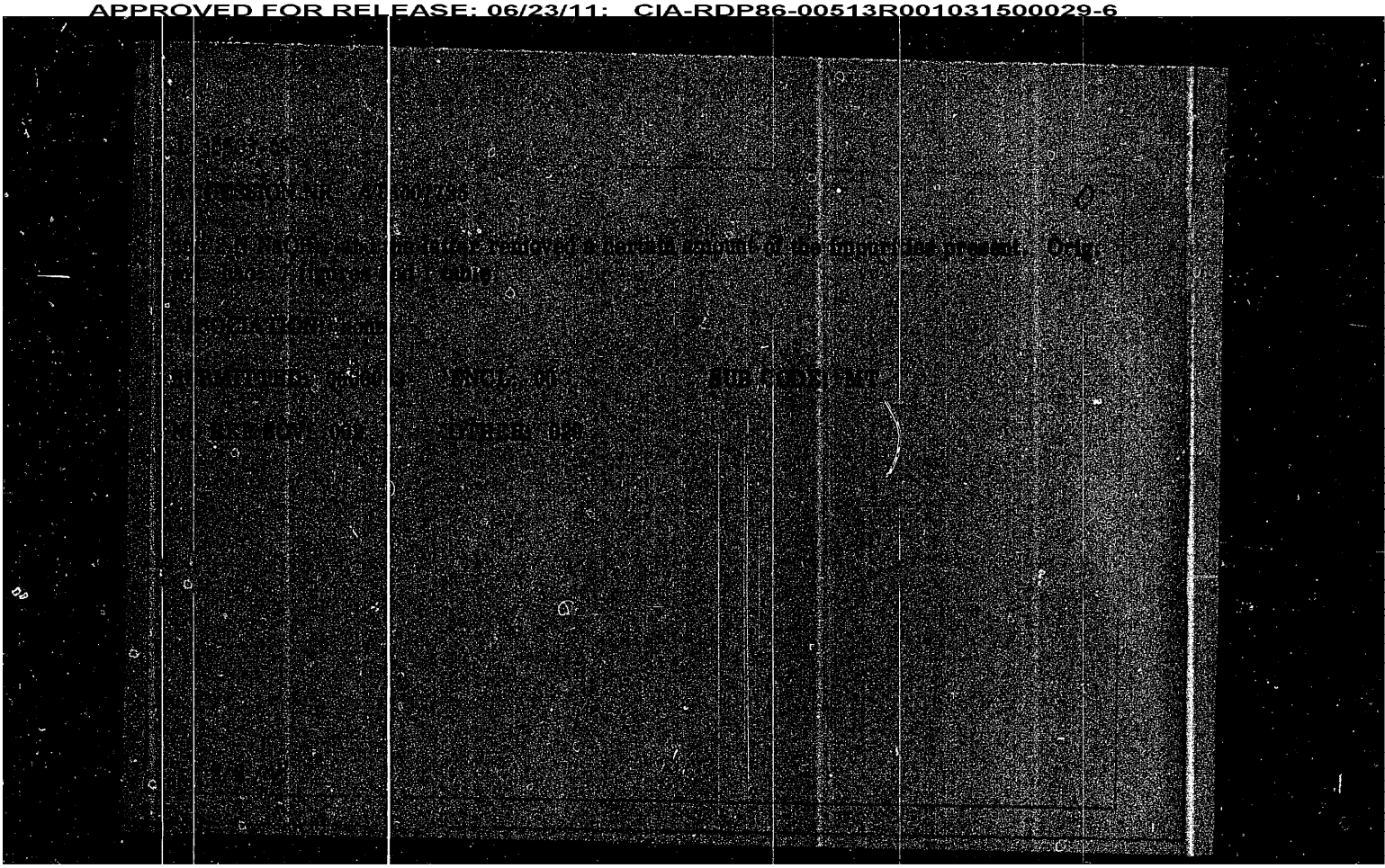
TITLE: Synthesis of fibrous silicates under hydrothermal conditions

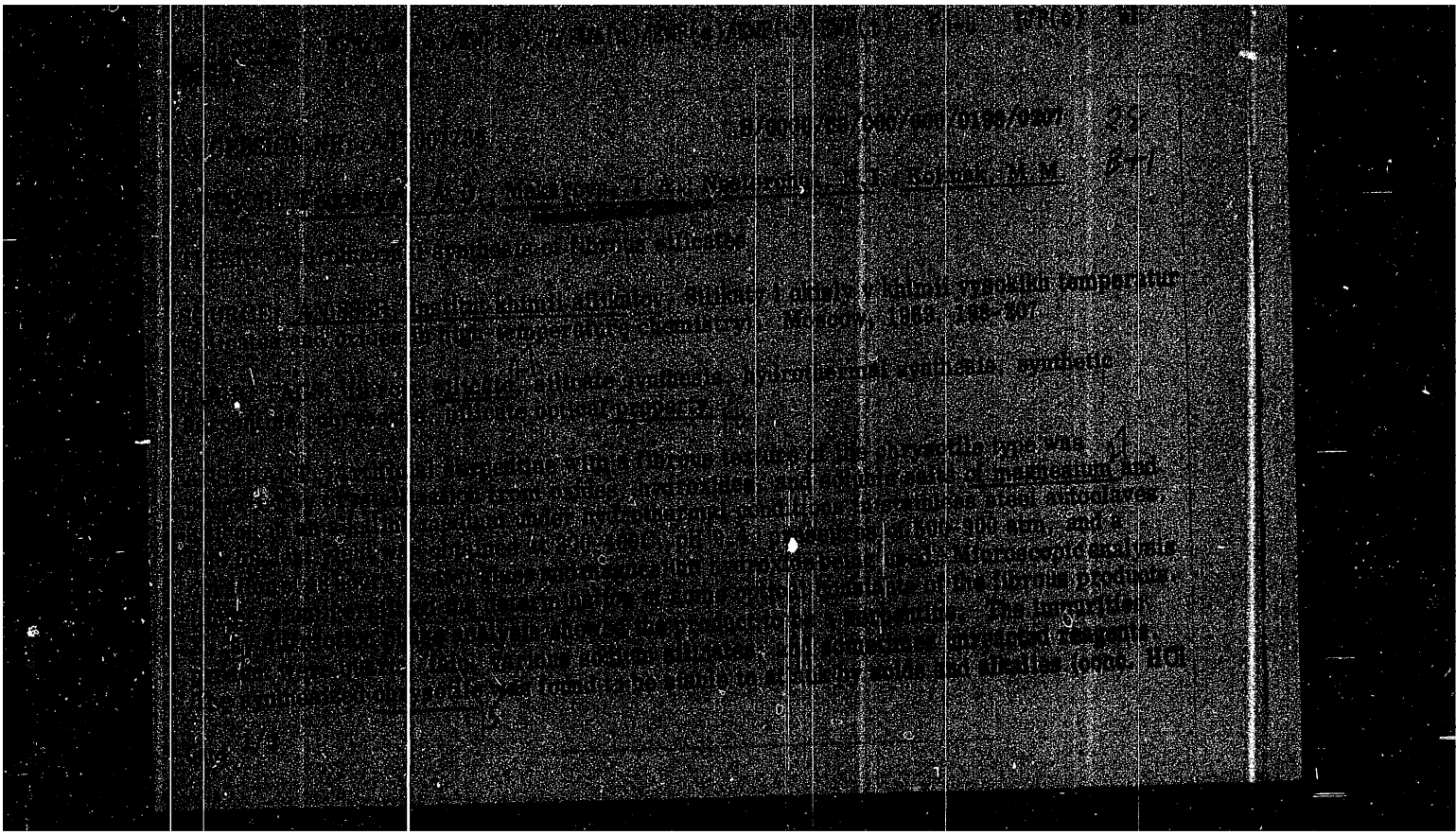
SOURCE: AN SSSR. Institut kristallografii. Rost kristallov, v. 6, 1965, 14-17

TOPIC TAGS: crystal growth, silicate, magnesium compound, sodium compound, crystallization

ABSTRACT: Artificial fibrous magnesium silicates were synthesized by crystallization from oxides, hydroxides, and soluble magnesium salts and sodium silicates in stainless steel autoclaves. The best results were obtained with freshly precipitated $Mg(OH)_2$ and sodium silicate (in the form of water glass). The experiments were conducted at 200 — 550C and pressures from 100 to 1100 kg/cm^2 and lasted up to two days. Serpentine was found to crystallize in the form of scales and fibers at 200 — 400C. At higher temperatures, an amphibole-type sodium magnesium silicate is formed, as indicated by chemical, x-ray, and crystal-optical analyses. The longest fibers (from 0.5 to

Card 1/2





KORSHAK, V.V.; ROGOZHIN, S.V.; MAKAROVA, T.A.

Coordination polymers. Part 15: Interaction of organotin compounds with dicarboxylic acids and their derivatives. Vysokom.soed. 4 no.9:1297-1302 S '62. (MIRA 15:11)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Tin organic compounds)
(Acids, Organic)

groups, causing discoloration (brown) and reducing the polymer solubility. The melting points of the polymers lay between 140 and 250°C, depending on the conditions of synthesis. Polymers containing thallium were obtained from α,α'-dihydroxy and α,α'-dimethoxy sebacic acids, owing to the weak bond between acyl groups and thallium. Besides pure ion bonds the polymers form coordination bonds with metal ions. The solubility of these polymers in organic solvents is limited. Thus it was shown that the dissolution of polymers containing metals is inhibited or reduced by the introduction of hydroxy and methoxy groups, respectively, into the α-position to the carboxylic group. There are 3 tables.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy AN SSSR
(Institute of Elemental Organic Compounds AS USSR)

SUBMITTED: April 10, 1961

39843
S/190/62/004/008/001/016
B117/B144

5,3832

AUTHORS: Korshak, V. V., Rogozhin, S. V., Makarova, T. A.

TITLE: Investigation into coordination polymers. XIV. Reaction of phenyl thallium diisobutyrate with dicarboxylic acids and their derivatives

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 8, 1962, 1137 - 1141

TEXT: The reaction of phenyl thallium diisobutyrate with adipic, azelaic, and sebacic acids in ethyl alcohol at 40°C yielded white powdery polymers. When compounds insoluble in aliphatic solvents were dissolved in aromatic solvents, acetic acid and in dimethyl formamide they yielded solutions of low viscosity (≈ 0.04 - 0.08). This is attributed to the spherical shape of the macromolecules or to cleavage of their chains in solution. It was found that the reaction of phenyl thallium diisobutyrate with dicarboxylic acids (with or without solvents) at temperatures of 150 - 155°C not only yielded polymers but caused decomposition of phenyl thallium diisobutyrate. The carbon content was considerably reduced by separation of phenyl

Card 1/2

KORELOVA, A.I.; MAKAROVA, T.A.

Polishing capacity of Soviet and imported polishing powders. Stek. i ker. 18 no.11:14-17 N '61. (MIRA 15:3)
(Grinding and polishing)

(Uglichskiy chasovoy zavod (Uglich Watch and Clock Factory)) on diamond tools. The Conference decided to establish an efficient test base, and indicated measures for a quick introduction of assembly lines for simultaneous two-sided grinding and polishing of a continuously moving glass band. A coordinated working plan of institutes and work laboratories was set up to study grinding and polishing procedures of glass, and to design some new plants. The results of previous investigations are to be introduced in the practice.

Card 5/5

Institute)) who spoke about the physical foundation of the formula for the intensity of abrasive dispersion of brittle bodies; V. A. Kosterin (Saratov Branch of the Glass Institute) on studies of the working distribution of the abrasive; M. N. Semibratov (MVTU imeni Baumana (Moscow Institute of Technology imeni Bauman)) on the effect of covering and wear coefficients on the geometrical form of a ground surface; A. V. Troitskiy (Kiyevskiy politekhnicheskiy institut (Kiyev Polytechnic Institute)) on the number of contacting abrasive grains as a function of grinding pressure; A. I. Tatarenkov on special features of semiconductor treatment; A. P. Aleksandrov (Borskiy zavod imeni Gor'kogo (Bor Works imeni Gor'kiy)) on investigation results of new polishing materials; D. M. Model' on the introduction of polychloro-vinyl tools at the zavod "Kinap" ("Kinap" Works) recommended by the Glass Department of the Leningradskiy tekhnologicheskiy institut imeni Lensoveta (Leningrad Institute of Technology imeni Lensovet) for grinding and polishing of optical glasses; Ye. D. Lamzina (Institut stekla (Glass Institute)) on tests with polishing rollers on a ШС-2 (ShS-2) assembly line; A. L. Ardamatskiy (State Optical Institute) on diamond tools; A. S. Ioffe, K. M. Lutova (Petrodvortsovyy chasovoy zavod (Petrodvorets Watch and Clock Factory)), and A.A.Gumilevskiy

spoke about the investigation of hydrodynamics of the flow in a horizontal sand classifier. The Czechoslovakian scientists Director I. Lederer, Engineer I. Getts, Doctor S. Minař, and the East-German scientist A. Kaller are also mentioned. Lecturers of the Konstantinovskiy filial (Konstantinovka Branch) of the Ukrainskiy institut stroitel'nykh materialov i izdeliy (Ukrainian Institute of Building Materials and Products) were: V.A. Dubrovskiy on the polishing procedure and polishing materials; R. I. Reshetnyak on the effect of some electrolytes on the efficiency of the polishing method. Lecturers of the Institute of Silicate Chemistry AS USSR were: A. S. Totesh on studies of the effect of composition and some physicochemical properties of glasses on the characteristics of grinding and polishing procedures; I. V. Strel'tsina showed that the durability of glass is determined by the quality of its mechanical treatment; A. I. Korelova spoke about polishing powders of various chemical compositions; T. A. Makarova on the polishability of iron oxide of different origins; P. Ya. Bokin on measuring the durability of abrasive grains; R.A.Govorova on the effect of physicomechanical properties of abrasives on the characteristics of glass grinding procedures. Also mentioned are: L. S. Tsesnek (Gosudarstvennyy opticheskiy institut (State Optical

from Czechoslovakia and Estern Germany. Professor A. D. Fedoseyev, Deputy Director of the Institute of Silicate Chemistry AS USSR, opened the Conference, and N. N. Kachalov, Corresponding Member AS USSR, held the opening speech stressing the insufficient relations between science and practice. Forty reports were delivered and discussed. The following are indicated: Yu. M. Tyurin (Saratovskiy filial Instituta stekla) Saratov Branch of the Glass Institute)) described the state and trends of development of the production of polished sheet glass; A. Ye. Grichevskiy spoke about the operation of the largest assembly line of the type ШС-1000 (ShS-1000) in the Soviet Union at the Saratovskiy zavod tekhnicheskogo stekla (Saratov Works of Technical Glass); B. S. Temkin (GSPKB - State All-Union Planning and Design Office) spoke about advantages and shortcomings of the simultaneous two-sided treatment of a continuously moving glass band; B. S. Panchenko spoke about the effect of the quality of rolled raw glass on the working characteristics of the assembly line at the zavod imeni Dzerzhinskogo (Works imeni Dzerzhinskiy); G. A. Likhtenshteyn spoke on the continuous classifier at the Konstantinovskiy zavod "Avtosteklo" (Konstantinovka "Avtosteklo" Works), and mentioned the modernization of machines of the type 4ШПС (4ShPS); B. M. Levin (MIIT)

S/072/61/000/001/003/003
B021/B054

AUTHORS: Totesh, A. S., Makarova, T. A.

TITLE: Conference on Grinding and Polishing of Glass and Other Brittle Materials

PERIODICAL: Steklo i keramika, 1961, No. 1, pp. 45-47

TEXT: The 6th All-Union Conference on the coordination of work of scientific research, educational, and planning institutes, as well as of works laboratories in the field of grinding and polishing of glass and other brittle materials was held in Leningrad in October, 1960. The Conference was convened by the Institut khimii silikatov AN SSSR (Institute of Silicate Chemistry AS USSR), the Gosudarstvennyy nauchno-issledovatel'skiy institut stekla (State Scientific Research Institute of Glass), and the Section of Chemistry and Technology of Silicates of the Vsesoyuznoye khimicheskoye obshchestvo im. D.I. Mendeleyeva (All-Union Chemical Society imeni D. I. Mendeleyev). It was attended by delegates of the Gosstroy SSSR (Office of State Construction), some sovnarkhoz, 19 institutes, 14 factories, 5 planning organizations, as well as scientists

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KORSHAK, V.V.; SLADKOV, A.M.; KRONGAUZ, Ye.S.; ROGOZHIN, S.V.; RODIONOVA, Ye.F.; CHELNOKOVA, G.N.; MAKAROVA, T.A.; SOSIN, S.L.; LOSKUTOVA, I.P., red.izd-va; KOLYAKOVA, T.V., tekhn.red.

[Chemistry and technology of synthetic macromolecular compounds. Carbocyclic compounds] Khimiia i tekhnologiia sinteticheskikh vysokomolekuliarnykh soedinenii. Carbocyclic compounds. Moskva, Izd-vo Akad.nauk SSSR, 1963. [illegible] (MIRA 14:11)
Khimicheskie nauki. no.6)

1. Chlen-korrespondent AN SSSR (for Korshak).
(Macromolecular compounds)
(Cyclic compounds)

microphotographs of Soviet and Czechoslovak crocus types are shown. The photographs were taken by M. G. Degen (Footnote 3). Table 2 lists the chemical composition of the cerium polishing agent "Polirit" investigated. The analyses were carried out by A. I. Kalinin (Footnote 4). To render possible the use of "Polirit", which exhibits a higher polishing productivity than crocus, for the polishing of plate glass, its price ought to be reduced, and methods of reclaiming its waste products should be developed. There are 2 figures, 2 tables, and 1 Soviet reference.

15(2)

AUTHORS: Korelova, A. I., Makarova, T. A. SOV/72-59-11-8/18

TITLE: The Polishing Capability of Domestic Crocus

PERIODICAL: Steklo i keramika, 1959, Nr 11, pp 24-27 (USSR)

ABSTRACT: At the laboratoriya kholodnoy obrabotki Instituta khimii silikatov AN USSR (Laboratory for Cold Working of the Institute of Silicate Chemistry of the Academy of Sciences, USSR), nine crocus types produced by different glassworks were investigated. The pH-meter of type LP-5 was used for measuring the hydrogen ions in the suspensions. The polishing capability of crocus was evaluated on the strength of the weight loss of the glass samples, while no chemical accelerators were added. Table 1 characterizes the crocus types under investigation. The chemical analysis was carried out by T. M. Makarova and O. N. Solov'yeva (Footnote 1). It showed that the Fe_2O_3-content varies from 61 to 98%. In the determination of the pH-values of the suspensions, the authors refer to the papers by N. N. Kachalov, V. G. Voano, A. I. Korelova (Footnote 2). The different performances of the crocus types are attributed to the absence of a uniform production technology, which ought to be centralized. In figures 1 and 2, the electronic

Card 1/2

BERLIN, A.A.; POPOVA, G.L.; MAKAROVA. T.A.

Synthesis, polymerization, and adhesive properties of the copolymers of unsaturated esters of glycidol. Vysokom.soed. 1 no.7:962-965 Jl '59. (MIRA 12:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut aviatsionnykh materialov.

(Glycidol) (Polymerization)

SOV/62-58-12-13/22

On the Characteristic Features of the Polymerization of Styrene in the Presence of Bivalent Initiators

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute of Elementorganic Compounds, Academy of Sciences, USSR)

SUBMITTED: April 2, 1957

Card 3/3

On the Characteristic Features of the Polymerization of Styrene in the Presence of Bivalent Initiators

parently be explained as follows: The main cause of a break of the chain during the radical polymerization is the recombination. In the case of a polymerization in the presence of benzoyl the recombination leads to the formation of a macromolecule which cannot grow any further. In the case of bivalent initiators such a reaction does not lead to the break of the chain, as the recombination product as well as the initial macromolecule remain active. This molecule has free valences at either end and can grow on in either direction. For this reason the recombination does not exert any disturbing influence at all on the growth process of the chain. It is maintained during the whole duration of the polymerization, which fact leads to the formation of extremely high-molecular polymers. The formation of monovalent radicals at the expense of the end groups of polymer oxides does not have any important influence on the total picture of polymerization. There are 3 tables and 7 references, 2 of which are Soviet.

5(3) SOV/62-58-12-13/22

AUTHORS: Korshak, V. V., Rogozhin, S. V., Makarova, T. A.

TITLE: On the Characteristic Features of the Polymerization of Styrene in the Presence of Bivalent Initiators (Ob osobennostyakh polimerizatsii stirola v prisutstvii bivalentnykh initsiatorov)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye khimicheskikh nauk, 1958, Nr 12, pp 1482-1485 (USSR)

ABSTRACT: In the present paper the authors investigated the polymerization of styrene in the presence of phthaloyl and terephthaloyl peroxide. The results obtained (Tables 1 and 2) show that the terephthaloyl and phthaloyl peroxide initiate the polymerization of styrene. As, however, these initiators are practically insoluble in styrene, the course of the reaction is considerably slower than with benzoyl peroxide. The polymerization in the presence of terephthaloyl and phthaloyl peroxide differs from the one in the presence of benzoyl peroxide by the fact that a continuous and uninterrupted increase in molecular weight of the polymers takes place all through the duration of polymerization. This characteristic feature of the polymerization in the presence of bivalent initiators can ap-

Card 1/3

MAKAROVA, T. A, Cand Tech Sci -- (diss) "Processes of formation of glass and crystalization in model fluoroberyllate systems." Len, 1957. 12 pp (Min of Higher Education USSR. Len Order of Labor Red Banner Technological Inst im Lensovet. Chair of Technology of Silicates), 100 copies (KL, 43-57, 89)

MAKAROVA, T. A.

191T24

USSR/Chemistry - Plastics Jul 51

"Research in the Field of the Chemistry and Technology of Synthetic High-Molecular Compounds. II. Preparation and Polymerization of Acetomethacrylic Esters of Cellulose," A. A. Berlin, T. A. Makarova

"Zhur Obshch Khim" Vol XXI, No 7, pp 1267-1273

Cellulose methacrylates were prepd by (1) action of methacrylic acid chloride on cellulose, (2) interaction of alkali cellulose and methacrylic acid chloride, (3) action of methacrylic anhydride on formic acid-treated cellulose. Method

191T24

USSR/Chemistry - Plastics (Contd) Jul 51

(3) gave best results, yielding monosubstituted methacrylate. Acetylation of methacrylates yielded cellulose acetomethacrylates which were polymerized and copolymerized with methacrylic acid esters in presence of benzoyl peroxide into infusible products, insol in org solvents.

191T24

FINKEL'SHTEYN, I.I., dotsent; MAKAROVA, T.A.; BABURKIN, I.A.; SMIRNOVA, F.P., inzhener laboratorii.

New method of double roving. Tekst.prom. 16 no.6:33-37 Je '56. (MLRA 9:8)

1. Ivanovskiy tekstil'nogo institut (for Finkel'shteyn); 2. Zamestitel' zaveduyushchego pryadil'nym proizvodstvom fabriki "Shuyskiy proletariy" (for Makarova).

(Spinning)

MAKAROVA, S.Z.; CHAMOVA, V.N.

Systems containing concentrated hydrogen peroxide. Report No.14: Solubility isotherms of ternary K_2CO_3 - H_2O_2 - H_2O systems. AN SSSR. Otd. khim. nauk no.9:1025-1030 S '58. (MIRA 11:10)

1. Institut obshchey i neorganicheskoy khimii imeni N.S. Kurnakova AN SSSR.

(Potassium carbonates) (Hydrogen peroxide)

ACCESSION NR: AP4038915

with the dyes, hence they do not interfere in the extraction-photometric determination of tantalum, although with high concentrations of these contaminant ions the KF concentration should be increased. Crystal violet, malachite green and brilliant green are suggested for the determination of tantalum in the presence of large amounts (up to 400-fold) of niobium. Optimum pH ranges for the extractions are: for methyl violet 1.9-2.2, crystal violet 1.6-2.3, malachite green 0.8-2.0 and brilliant green 0.6-2.0. The colored extracts should not be exposed to sunlight since their color becomes less bright. Orig. art. has: 2 tables and 3 figures.

ASSOCIATION: Moskovskiy gosudarstvenny*y universitet im. M. V. Lomonosova (Moscow State University)

SUBMITTED: 10Sep63 ENCL: 00

SUB CODE: MT NO REF SOV: 009 OTHER: 001

Card 2/2

ACCESSION NR: AP4038915 S/0075/64/019/005/0564/0568

AUTHOR: Makarova, S. V.; Alimarin, I. P.

TITLE: Extraction of fluotantalate with basic dyes. Communication 2. Comparative study of certain basic triphenylmethyl dyes as reagents for the extractionphotometric determination of tantalum.

SOURCE: Zhurnal analiticheskoy khimii, v. 19, no. 5, 1964, 564-568

TOPIC TAGS: tantalum, extraction photometric determination, quantitative analysis, fluotantalate, color reagent, basic triphenylmethyl dye, parafuchsin, methyl violet, crystal violet, malachite green, brilliant green, rhodamine B, butyl rhodamine, ethyl rhodamine, rhodamine 3R, rhodamine 6 Zh, sensitivity, titanium, zirconium, tungsten, niobium, interfering ion

ABSTRACT: The extraction of tantalum as fluotantalate compounds with the following basic triphenylmethane dyes was studied: parafuchsin, methyl violet, crystal violet, malachite green, brilliant green, rhodamine B, butyl rhodamine, ethyl rhodamine (rhodamine 3R) and rhodamine 6 Zh. The sensitivity of all these dyes is high. Titanium, zirconium and tungsten do not form compounds which are extracted

Card 1/2

ALIMARIN, I.F.; MAKAROVA, S.V.

Extraction of fluotantalates with basic dyes. Report No. 1: Extraction of microgram amounts of tantalum as crystal violet fluotantalate. Zhur. anal. khim. 19 no. 1:90-93 '64. (MIRA 17:5)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

LUCHIKHINA, S.Ye.; MAKAROVA, S.V.; IVACHEV, L.N.; MAKAROV, L.V.

Compressorless method for the aeration of drilling fluids in hole boring. Razved. i okh. nedr 30 no.9:19-23 S '64.

(MIRA 17:12)

1. Ural'skoye geologicheskoye upravleniye (for Luchikhina, Makarova). 2. Sverdlovskiy gornyy institut (for Ivachev, Makarov).

ACCESSION NR:AP4009728

tion of the complex discussed. Tests were conducted with these optimal concentrations: 0.69.10-5 M Ta, 0.05 M NaF and 3.10-4 M crystal violet. Optimal pH for photometric Ta determination was found at 0.3-1.2 for chlorobenzene so as to obtain stability and avoid extraction of the crystal violet. Orig. art. has 5 figures and 4 tables.

ASSOCIATION: Moskovskiy gosudarstvennyi universitet im, M. V. Lomonosova (Moscow State University)

SUBMITTED: 19Mar63 DATE ACQ: 14Feb64 ENCL:00

SUB CODE: CH NR REF SOV: 006 OTHER: 002

Card 2/2

ACCESSION NR: AP4009728 S/0075/64/019/001/0090/0093

AUTHORS: Alimarin, I. P.; Makarova, S. V.

TITLE: Extraction of fluotantalate with basic dyes

SOURCE: Zhurnal analiticheskoy khimii, v. 19, no. 1, 1964, 90-93

TOPIC TAGS: Fluotantalate extraction, fluotantalate crystal violet complex, tantalum photometric determination, crystal violet complex formation, fluotantalate complex extractants, chlorobenzene, chlorosubstituted hydrocarbons, optical density measuring

ABSTRACT: The influence of the nature of the organic solvent on the extraction of crystal violet fluotantalate has been studied, using 11 organic solvents. Contrary to earlier findings, no relation was found between the dielectric constant of these solvents and their extractive capacity for the title complex. It was found that the best extractants are chloro-substituted hydrocarbons; chloroform, dichloroethane and chlorobenzene. Chlorobenzene is recommended as the extractant for photometric determination (0.5-5 micro g per 1 ml solution). The laboratory procedure is described and the probable forma-

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